

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007527**Date Inspected:** 17-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng, Liu Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

Outside Yard at Vertical Mill:

The QA Inspector randomly observed the vertical mill was idle and that there was no milling being performed on the longitudinal stiffeners and skin plates on Lift 1 East Tower Shaft or Lift 2 East Tower Shaft at this time.

The QA Inspector randomly observed that no contract work was being performed in the interiors or on the exteriors of Lift 1 East Tower Shaft, Lift 2 East Tower Shaft or Lift 2 South Tower Shaft.

Heavy Equipment Shop Bay 11:

The QA Inspector randomly observed ZPMC welder ID 042195, utilizing the Submerged Arc Welding (SAW) Process in the 1G (Flat Groove) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S-2 to weld the butt seams at WJ's ESD1-FESA4-2A/F-6B and 7B on Lift 4 Skin Plate E. The QA Inspector randomly observed ZPMC Quality Control monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 650 amps, 32.5 volts with a travel speed of 500 millimeters (mm) per minute. Weld parameters appeared to comply with contract requirements.

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The QA Inspector randomly observed ZPMC welders ID 202821 and ID 066155, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2232-TC-U2-F to weld the long seam on either side of the lower jig ring on Lift 2 West between Skin Plates C and D. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welders ID 202821 and ID 066155, utilizing the FCAW Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2232-TC-U2-F to weld the long seam on either side of the upper jig ring on Lift 2 West between Skin Plates C and D. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Li Wei Ya ID 202821 and ID 066155, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2112 to tack weld the triangle plates to the diagonal plates for Lift 1 West Tower Shaft. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed 6 ZPMC helpers utilizing angle grinders to blend the cover pass on the long seam between Skin Plates C and D on Lift 2 North Tower Shaft.

The QA Inspector randomly observed 3 ZPMC helpers utilizing angle grinders to blend the cover pass on the long seam between Skin Plates A and B on Lift 2 North Tower Shaft.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for

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your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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